

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (original) Method of heating a container (R_i) placed on a cooktop comprising heating means (11) respectively associated with inductors forming means (11) for detecting the presence of a container, said heating means associated with said inductors forming a two-dimensional array on the cooking surface, characterized in that it comprises the following steps:

- a step (E20) of searching for a heating area (Z_i) consisting of a set of heating means at least partly covered by said container; and

- a step (E60) of calculating a power (P_j) delivered by each heating means (I_{ij}) in said heating area (Z_i) as a function of an overall set point power (P_i) associated with said heating area (Z_i) and a rate of coverage (T_j) by the container (R_i) of each detection means (I_{ij}) associated with said heating means (I_{ij}).

2. (original) Heating method according to claim 1, characterized in that it further comprises a preliminary step (E10) of declaring the addition of said container to the cooking surface.

3. (currently amended) Heating method according to ~~either~~ claim 1 ~~or claim 2~~, characterized in that it comprises a step (E70) of detecting movement of a container (R_i) associated with an initial heating area (Z_i) and a step (E80) of searching for a shifted heating area (Z'_i) consisting of heating means respectively associated with detection means at least partly covered by said container (R_i).

4. (original) Heating method according to claim 3, characterized in that it further comprises a step (E110) of associating said overall set point power (Pi) associated with the initial heating area (Zi) with the shifted heating area (Z'i).

5. (currently amended) Heating method according to ~~any one of claims 1 to 4~~ claim 1, characterized in that the search step (E20, E80) comprises for each successive detection means of the cooking surface a test step (E26, E36, E96) for detecting the presence of a container (Ri) over said detection means and, if such presence is detected, a step (E27, E37, E87) of adding the heating means associated with said detection means to the heating area (Zi, Z'i).

6. (original) Heating method according to claim 5, characterized in that the search step (E20, E80) comprises, for each successive detection means of the cooking surface, a preliminary test step (E23, E33, E93) for detecting if said heating means associated with said detection means belongs to another heating area, and said test steps (E26, E36, E86) and addition steps (E27, E37, E87) are executed if said heating means associated with said detection means do not belong to another heating area.

7. (currently amended) Heating method according to ~~either~~ claim 5 ~~or~~ claim 6, characterized in that the search step comprises a step (E28, E38, E88) of memorizing for each heating means added to the heating area (Zi, Z'i) a rate of coverage (TREC) by a container of the detection means associated with said heating means.

8. (currently amended) Heating method according to ~~any one of claims 5 to 7~~ claim 5, characterized in that, if said heating area includes at least one added heating means, the search step

(E20, E80) comprises a step (E39, E82) of determining a list of heating means not belonging to another heating area and adjoining at least one heating means of said heating area, and said test and addition steps are executed for each heating means from said list.

9. (currently amended) Heating method according to ~~any one of claims 5 to 8~~ claim 5, characterized in that in the test step (E26, E36, E86) the presence of a container above the detection means is detected if the rate of coverage of said detection means is greater than a predetermined threshold value.

10. (original) Heating method according to claim 9, characterized in that said predetermined threshold value is equal to 40%.

11. (currently amended) Heating method according to ~~any one of claims 1 to 10~~ claim 1, characterized in that said heating means (11) are inductors (11) forming means for detecting the presence of the container (R_i).

12. (currently amended) Cooktop comprising heating means (11) respectively associated with inductors forming induction detection means (11) for detecting the presence of a container, said heating means associated with said inductors forming a two-dimensional array on a cooking surface, characterized in that it comprises means adapted to execute the heating method according to ~~any one of claims 1 to 11~~ claim 1.

13. (original) Cooktop according to claim 12, characterized in that the heating means (11) consist of inductors (11) forming a two-dimensional array on the cooking surface.

14. (new) Heating method according to claim 2, characterized in that it comprises a step (E70) of detecting movement of a

container (R_i) associated with an initial heating area (Z_i) and a step (E80) of searching for a shifted heating area (Z'_i) consisting of heating means respectively associated with detection means at least partly covered by said container (R_i).

15. (new) Heating method according to claim 14, characterized in that it further comprises a step (E110) of associating said overall set point power (P_i) associated with the initial heating area (Z_i) with the shifted heating area (Z'_i).

16. (new) Heating method according to claim 6, characterized in that the search step comprises a step (E28, E38, E88) of memorizing for each heating means added to the heating area (Z_i, Z'_i) a rate of coverage (TREC) by a container of the detection means associated with said heating means.